HSMP User Guide

Contents

Information Displayed in HSMP

The Health System Measurement Project brings together trend data on a limited set of key health system measures from multiple data sources to provide a picture of the status of the U.S. health system.

The Project focuses on ten critical dimensions of our health care system. These dimensions encompass the availability of care, the quality of care, the cost of care, the health of the population, and the dynamism of our health care system. The Project examines the evolution of these aspects of our system over time. It also assesses the status of these dimensions of the system with respect to subgroups of the population, with a particular emphasis on vulnerable populations.

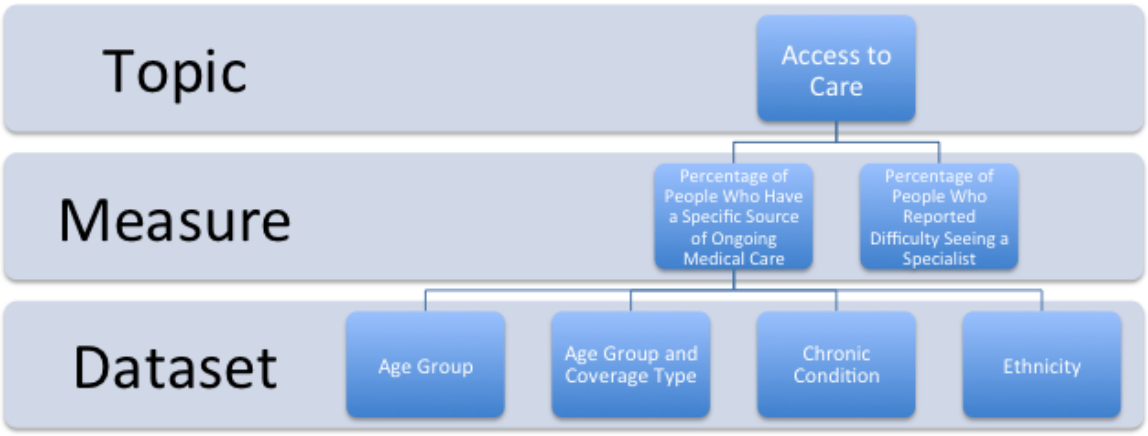
The measures are divided into the 10 topical areas and are cross-listed as appropriate:

- Access to Care
- Cost and Affordability
- Coverage
- Health Information Technology
- Innovation
- Population Health
- Prevention
- Quality
- Vulnerable Populations
- Workforce

Where data allow, options enable users to see variations in this measure across populations (e.g., age, race, ethnicity, sex).

Data Hierarchy

Reviewing the data hierarchy of the HSMP 2.0 system is important to understanding how the data elements fit together.



The highest level of the hierarchy is the home page, which contains information about recently updated data.

Topical are one level deeper. Each topical area has between 3 and 12 measures.

A measure is one level deeper. Most measures have multiple datasets displaying measures by a number of characteristics, such as income level, health insurance coverage type, age, etc. Each measure has metadata that provide information about that measure.

Datasets are the lowest level and contain computed statistical values. Datasets are represented in the User Interface as both charts (within a measure page) and tabular datasets (viewable online and available for download to Excel or .csv). Datasets also have descriptive metadata.

In addition to core data elements (topics/measures/datasets-charts), the system also has the following features:

- An index page to find measures by topical area
- A Help/FAQ/Contact Us page.

How to Locate Information

Data Source

The data source is stated at the top of each Measure page, beside the label for "Data Source." Many of the data sources are linked to sites that provide additional information on the data.

Date of Most Recent Update

The date each dataset was most recently updated is available above each graph on the Measure page.

Measure Calculation

The measure calculation methodology is available at the top of each Measure page in a box labeled "Metrics Calculation." For individual breakouts, additional breakout-specific calculation methodology is provided directly above the dataset graph on the Measure page.

How to Interact with the Data

Switching from graphs to tables

The breakout display can be switched from a graph to a data table by clicking the "table" button on the upper right corner of each graph.

Selecting different data groups for display

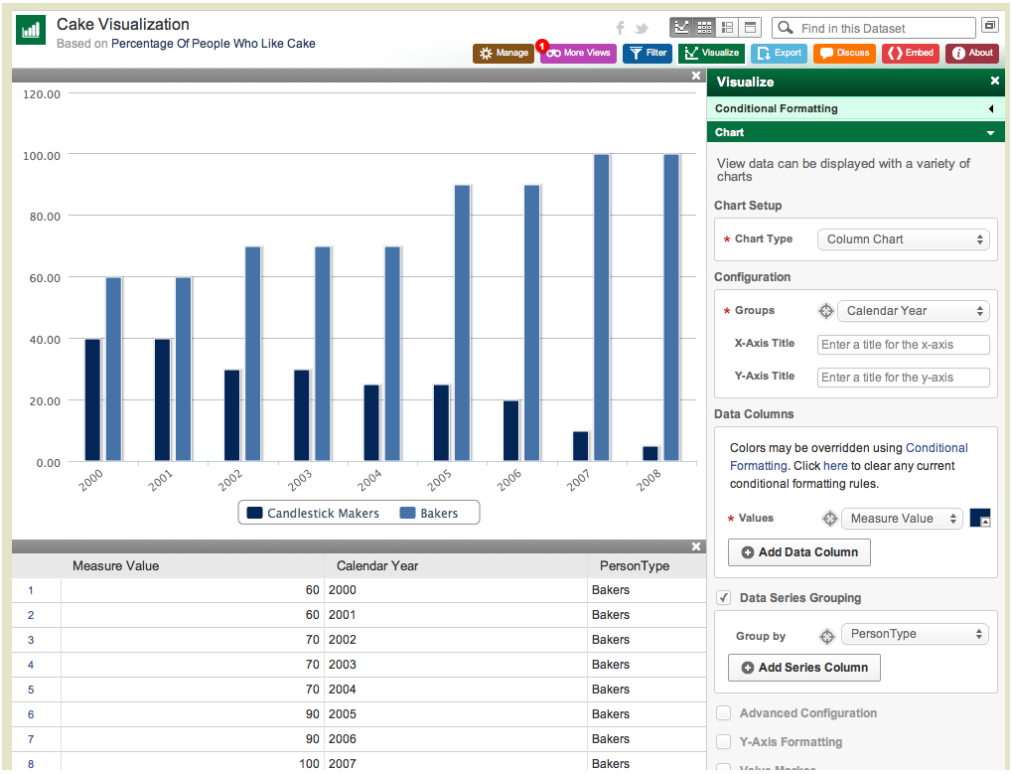
You may use the radio buttons and checkboxes at the top of measure pages and to the right of each dataset to select data groups for display. Unchecking all checkboxes in a group disables the filtering, hence all data for that group will be displayed.

Exploring the Data

To the right of each breakout on the Measure page, click the "Explore these Data" button. This leads to the detailed data page that displays all of the data values for that breakout. There, users can reorganize the data using Filters, Groups, and Sorting and display the data in Charts or Maps without downloading the data file. You can also save and embed any views created from the Explore link.

Visualizing data in a new way

Click on the visualization tab.



Visualization including example chart type, group, values, and secondary grouping (group by).

Once you open the visualization pane, there are some settings you will need to configure in order to create a chart.

Specify the **chart type**. In most cases, the most useful chart type for comparing data will be a column chart, so choose that.

Under **configuration**, the **Groups** setting configures which column is used for the X axis series. In almost all cases, you will want this to be your Year column. Likewise, the **Values** option under **Data Columns** specifies the Y-axis source, which will always be your Measure Value.

In advanced configuration, you can choose where or whether to show the legend. Under Y-axis formatting you can control the min/max Y axis points. And in the "Value Maker" setting, you can add a watermark horizontal value and caption (often used to denote a goal).

If you are working with national summary data that contains only a year and a value, then you can click, "Apply" to see your chart. Otherwise, you will have to indicate how you want the data grouped into series. Do this by expanding the **Data Series Grouping** section, then filling in each of the non-value, non-year columns. In the example above, we had an additional dimension of Person Type, so choose to group by that variable. Click on "Apply" to see your changes.

If you want to save your chart, click on the "Save As…" button at the top and give your dataset a descriptive name. It will be saved and you can return to it or link to that permanent URL.

Downloading and Exporting the Data

To download the data, click the "Download this Data" button to the right of the breakout chart on the Measure page. Users can also download data by clicking the "Explore this Data" button to the right of each breakout on the Measure page and then clicking the "Export" button in the upper right corner, which offers the ability to export data to their computers in CSV, Excel, or other formats.

Additional Information on Frequently Used Data Source

HCUP

The Healthcare Cost and Utilization Project (HCUP), sponsored by the Agency for Healthcare Research and Quality (AHRQ), includes the largest collection of longitudinal hospital care data in the United States. HCUP databases contain administrative data collected during the routine process of providing care and billing for services. For most states in the U.S., all (or nearly all) hospitals submit patient bills or claims to statewide data organizations in state government, a state hospital association, or a private data entity.

AHRQ has voluntary agreements with 44 states (as of 2011), which submit all acute care inpatient data. AHRQ also collects emergency department (ED) and ambulatory surgery data (both hospital-based and free-standing) from many of these states. Currently, HCUP contains about 95% of all inpatient records and 65% of all ED records in the U.S.

Once AHRQ receives the administrative records from the states, the data are converted into a uniform format. The data include patient characteristics (e.g., age, gender), diagnoses, procedures, admission source and type, expected payer, discharge status, length of stay, and charges. HCUP data include all patients regardless of payer – Medicare, Medicaid, private insurance, and the uninsured. HCUP can be used to produce national and regional information.

MEPS

The Medical Expenditure Panel Survey (MEPS), is a set of large-scale surveys of families and individuals, their medical providers (doctors, hospitals, pharmacies, etc.), and employers across the United States. MEPS collects data on the specific health services that Americans use, how frequently they use them, the cost of these services, and how they are paid for, as well as data on the cost, scope, and breadth of health insurance held by and available to U.S. workers.

The MEPS sample frame consists of households that participated in the National Health Interview Survey (NHIS) for the prior year. The MEPS consists of several major components: the Household Component

(HC), the Insurance Component (IC), and the Provider Component (PC). The Household Component provides data from individual households and their members (the HC), which is supplemented by data from their medical providers (the PC).

MEPS-IC

The Medical Expenditure Panel Survey Insurance Component (MEPS-IC) collects data from a sample of private and public sector employers on the health insurance plans they offer their employees. The MEPS-IC is a nationwide sample of establishments and state/local governments, and provides national and state estimates each year. National estimates are produced from the MEPS-IC on premiums and employee contributions for enrollees, deductibles and copayments for enrollees, as well as establishment-based and employee-based characteristics. Since 2003, the sample each year has been sufficient to support State-level estimates for all 50 States and the District of Columbia. The MEPS-IC uses multiple data collection methods, including mail and computer assisted telephone interviewing.

NAMCS

The National Ambulatory Medical Care Survey (NAMCS) is a national survey of patient visits to nonfederal office-based physicians, as well as physicians and mid-level providers sampled in community health centers (CHCs). NAMCS utilizes a multistage probability design that involves probability samples of primary sampling units (PSUs), physician practices within PSUs, and patient visits within practices. The survey consists of an induction interview with the physician/CHC provider and obtains information on selected practice characteristics. For each sampled physician, a random sample of approximately 30 patient visits is selected from patients seen in the week of the induction interview. Visit information is collected on patient characteristics, visit characteristics, diagnoses, and medications.

NHANES

The National Health and Nutrition Examination Survey (NHANES) is a cross-sectional nationally representative survey utilizing health interview and physical examination data. NHANES combines personal interviews with physical examinations and laboratory studies. The NHANES personal interview consists of a family survey, a household survey, and the individual sample person survey, and collects information on demographic, socioeconomic, dietary, and health-related questions. The physical examination component is conducted in a Mobile Examination Center (MEC) and consists of medical, dental, and physiological measurements, as well as laboratory tests administered by trained medical personnel.

Each year NHANES collects data from approximately 5,000 individuals in 15 different primary sampling units. Although NHANES is designed to produce yearly national estimates, single year estimates tend to be less reliable than multi-year estimates. As a result, 2-year data collection cycles are used to produce more reliable national estimates. Approximately 10,000 individuals participated in the 2009-2010 NHANES household interview and mobile examination. For small population groups and low prevalence conditions and diseases, pooling data over several years is necessary.

NHIS

The National Health Interview Survey (NHIS) is a multi-stage, clustered sample design, with oversampling of the black, Hispanic, and Asian populations, that produces national estimates on health insurance coverage, health care access and utilization, health status, and health behaviors. The NHIS sample is drawn from each State and the District of Columbia. The sample size for the NHIS is approximately 35,000 households containing about 87,500 persons. In 2010, almost 90,000 individuals

living in 34,000 households were interviewed for the NHIS. NHIS includes a family survey, as well as adult and child surveys.

The survey instrument contains four main modules: household composition, family, sample child, and sample adult. For the household composition module, a household respondent provides demographic information on all members of the household. For each family within a household, the family module or interview is completed by one family respondent (aged 18 years or over) who provides socio-demographic and health information on all members of the family. Additional health information is collected from one randomly selected adult (sample adult) aged 18 years or over, and from the parent or guardian of one randomly selected child under age 18 (if there are children in the family).

Additional Questions and Support

Questions about Data

For questions related to the measures or data displayed on the site, please contact the Health System Measurement Project Administrator at the Office of the Assistant Secretary for Planning and Evaluation at HSMPadmin@hhs.gov

Technical Questions

For technical questions, support, and training resources, contact Socrata and support.socrata.com, support@socrata.com and (206) 340-8008, ext. 3

Frequency of application update

The measures on the Health System Measurement Project will be reviewed by an HHS governance council annually and new measures may be added and outdated measures retired overtime.

Frequency of data update

Data for each measure will be updated annually or more or less often as new data become available. Notices of measures that have been updated with new data will appear on the homepage.

Copying and Pasting

In the HSMP system you may want to copy and paste the image of a chart into a presentation. To do this, use the built-in functions on your windows machine.

How do I take a screenshot?

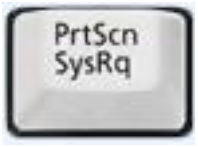
press 

Figure 1: Print Screen Button

= Windows captures the entire **screen** and copies it to the **clipboard**.

Where can I find that key?

Figure 2: Print Screen Button

Look for this group of keys at the **upper right** of your keyboard. Note: **Print Screen** (PrtScn) might have been abbreviated differently on your keyboard.

How do I take a screenshot of a single window?

hold 

Figure 3: Alt Button

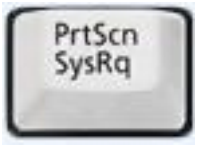
and press 

Figure 4:Print Screen Button

= Windows captures only the currently active **window** and copies it to the **clipboard**.

It's in the clipboard now. How can I paste it into a document or something?

hold 

Figure 5: Control Button

and press 

Figure 6: V button

= Windows pastes the screenshot (that is in the **clipboard**) into a document or image you are currently editing.

Where should I paste it? I just need a (graphics) file.

- Start "Paint" | Paste | Save
- Or paste directly into PowerPoint or MS Word

In addition, snipping tool is a dedicated program for taking screenshots on Vista and Windows 7:

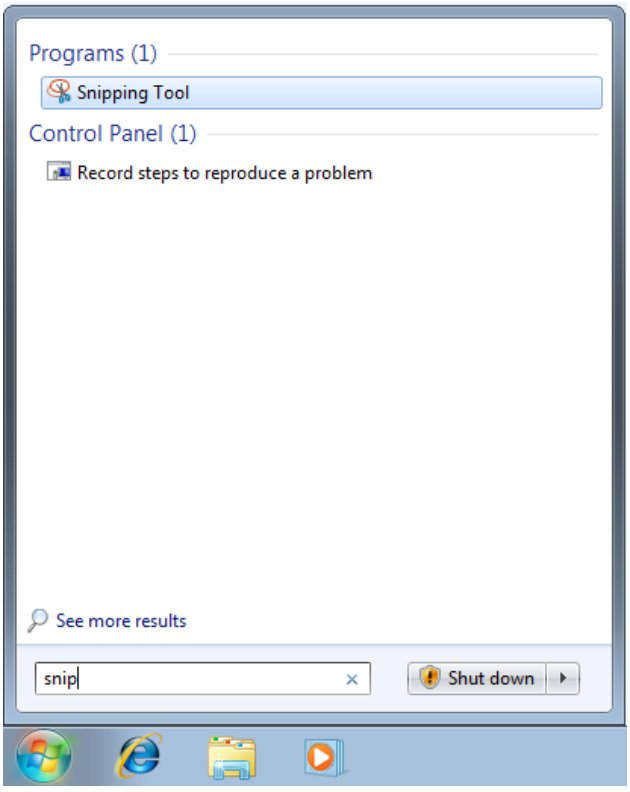


Figure 7: Cropping Tool

Cropping in PowerPoint

You can crop any picture by using the **Crop** command.

1. Select the picture you want to crop.
2. On the **Picture** toolbar click **Crop**  .
3. Position the cropping tool over a cropping handle and then do one of the following:
   - To crop one side, drag the center handle on that side inward.
   - To crop equally on two sides at once, hold down CTRL as you drag the center handle on either side inward.
   - To crop equally on all four sides at once, hold down CTRL as you drag a corner handle inward.